

ABSTRACT OF THE INVENTION

The present invention relates to a system and methodology facilitating automation security in a networked-based industrial controller environment. Various components, systems and methodologies are provided to facilitate varying levels of automation security in accordance with security analysis tools, security validation tools and/or security learning systems. The security analysis tool receives abstract factory models or descriptions for input and generates an output that can include security guidelines, components, topologies, procedures, rules, policies, and the like for deployment in an automation security network. The validation tools are operative in the automation security network, wherein the tools perform security checking and/or auditing functions, for example, to determine if security components are in place and/or in suitable working order. The security learning system monitors/learns network traffic patterns during a learning phase, fires alarms or events based upon detected deviations from the learned patterns, and/or causes other automated actions to occur.